UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/582,903	11/17/2006	Josef Pozivil	M03B334	5002

20411 7590 11/15/2010

The BOC Group, Inc.
575 MOUNTAIN AVENUE
MURRAY HILL, NJ 07974-2082

EXAMINER	
BAYOU, AMENE SETEGNE	
ART UNIT	PAPER NUMBER
3746	
MAIL DATE	DELIVERY MODE
11/15/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/582,903	POZIVIL ET AL.	
	Examiner	Art Unit	
	AMENE S. BAYOU	3746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08/25/10*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *13 June 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 12 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim in proper dependent form, or rewrite the claim independent form. Claim 12 is directed to a storage tank which is a distinct invention different from a compressor. The claim does not for further limit the details of the compressor of claim 1 in such a way as for example "the compressor further comprises a gas storage tank" .Please note that the test as to whether a claim is a proper dependent claim is that it shall include every limitation of the claim from which it depends (35 U.S.C. 112, fourth paragraph) or in other words that it shall not conceivably be infringed by anything which would not also infringe the basic claim. A dependent claim does not lack compliance with 35 U.S.C. 112, fourth paragraph, simply because there is a question as to (1) the significance of the further limitation added by the dependent claim, or (2) whether the further limitation in fact changes the scope of the dependent claim from that of the claim from which it depends. The test for a proper dependent claim under the fourth paragraph of 35 U.S.C. 112 is whether the dependent claim includes every limitation of the claim from which it depends. The test is not one of whether the claims differ in scope. See MPEP 608.01(n) section III.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-4, 6-7, 9-16 are rejected under 35 U.S.C 103(a) as being unpatentable over Toshiaki (Japanese patent publication JP10121913) in view of Seki (4015436).

4. In re claim 1, Toshiaki discloses a compressor system including:

- Rotary liquefied natural gas boil-off compressor ,in figure 1,comprising at least two compression stages (22,24) in series , a gas passage (26) passing through the series of compression stages (22,24) ,the gas passage (26) extending through and being in heat exchange relationship with at least one cooling means (27) disposed between the compression stages (22,24) , wherein the at least one cooling means (27) is a cryogenic cooling means (see abstract and paragraph [0006]). Although In one of the embodiments shown in figure 4 Toshiaki's discloses a valve 34 installed at the discharge side 32 of compressor 24 there is no teaching about the use of similar valve between the compressor stages. But Seki in the field of LNG compressor application teach a cryogenic cooling means having valve means (7), for controlling flow of coolant into the cooling means in response to the inlet temperature, or a related

parameter, of the compression stage (1) downstream of the cooling means to maintain inlet temperature at a temperature between chosen sub –ambient temperature limits, in figure 1 ,abstract and column 2,lines 26-31 and column 2,lines 59-column 3,line 45. Therefore It would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the cryogenic compressor system of Toshiaki by including a valve system before after the cryogenic cooler but before a stage of a compressor as taught by Seki in order to automatically monitor or adjust the temperature of the working fluid.

5. In re claim 2 Toshiaki in view of Seki as applied to claim 1 discloses the claimed invention:

Toshiaki discloses:

- The cryogenic cooling means comprises an indirect cooling means ,in figure 1.

6. In re claim 3 Toshiaki in view of Seki as applied to claim 1 discloses the claimed invention:

Seki discloses:

- The cryogenic cooling means comprises a direct cooling means, in figure 1.It would have been obvious to one skilled in the art at the time the invention was made to choose a direct cooling (injection) method as taught by Seki because of simplicity that does not require complicated piping line or heat exchanger.

7. In re claim 4 Toshiaki in view of Seki as applied to claim 3 discloses the claimed invention:

Seki discloses:

- The direct cooling means comprises a chamber (inherently) having an inlet for the introduction of a cryogenic liquid, in figure 1. Please note that since applicant has not defined a specific chamber type in the claims, the section where the cooling fluid is introduced in Seki can be considered a chamber.

8. In re claim 6 and 7 Toshiaki in view of Seki as applied to claim 1 discloses the claimed invention except mentioning that there is a cryogenic cooling means intermediate each pair of successive compression stages. But the compressor of Toshiaki is a two stage compressor and therefore It would have been obvious to one having ordinary skill in the art at the time the invention was made to install a cryogenic cooling means (either direct or indirect type based on design choice) in between each pair of successive compressor stages (if there are more stages such as three or more) because it is a mere duplication and it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. St. *Regis Paper Co. v. Bemis Co., 193 USPQ 8.*

9. In re claim 9 Toshiaki in view of Seki as applied to claim 1 discloses the claimed invention:

Toshiaki discloses:

- There is a cryogenic cooling means (35) downstream of the final compression stage (35), in figure 2.

10. In re claim 10 Toshiaki in view of Seki as applied to claim 1 discloses the claimed invention:

Seki discloses:

- There is a cryogenic cooling means (6) upstream of the first compression stage , in figure 1. It would have been obvious to one skilled in the art at the time the invention was made to include a cryogenic cooler upstream of the first stage of the compressor of Toshiaki as taught by Seki in order to lower the temperature of the incoming gas.

11. In re claim 11 Toshiaki in view of Seki as applied to claim 1 discloses the claimed invention since the claimed "compressor" does not specify which compressor stage and the heat exchangers disclosed by both Toshiaki and Seki can be considered as forced liquefied natural gas vaporizer.

12. In re claim 12 Toshiaki in view of Seki as applied to claim 1 discloses the claimed invention:

Seki discloses:

- A liquefied natural gas storage tank (2) having an outlet for boiled-off natural gas communicating with a compressor (1) the cryogenic cooling means (6) in communication with the liquefied natural gas in the storage tank (2) ,in figure 2.

13. In re claims 13 -16 Toshiaki in view of Seki disclose a method of operating a liquefied natural gas compressor because under the principles of inherency, if a prior art device, in its normal and usual operation, would necessarily perform the method claims, then the method claimed will be considered to be anticipated

by the prior art device. When the prior art device is the same as a device described in the specification for carrying out the claimed method, it can be assumed the device will inherently perform the claimed process. *In re King*, 801 F.2d 1324,231 MPEP 2112.02.In regards to the temperature range stated in claim 14 please note that Seki teaches the same range in column 2,lines 59-68.In regards to the pressure ratio stated in claim 15 and 16 It would have been obvious to one having ordinary skill in the art at the time the invention was made to select the inlet temperature range for each compressor stage because the choice merely depends on design criteria and it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

14. Claims 5 is rejected under 35 U.S.C 103(a) as being unpatentable over Toshiaki (Japanese patent publication JP10121913) in view of Seki (4015436) as applied to claim 4 further in view of Khan et al. (reissued US patent number 33408).

15. In re claim 5 Toshiaki in view of Seki disclose the claimed invention but failed to disclose a separator in communication with the heat exchanger. But Khan et al teach an outlet of a direct cooling means (74) communicates with a vessel (100) adapted to disengage particles of liquid from the natural gas, the vessel (100) having an outlet (102) for natural gas communicating with compression stage (86),in figure 2 and column 4,lines 43-45. It would have been

obvious to one having ordinary skill in the art at the time of the invention was made to modify the modified compressor of Toshiaki by installing a separator that communicates with the direct heat exchanger as taught by Khan et al in order to separate the gaseous and liquid phases and thus increase the efficiency of the system.

16. Claims 8 is rejected under 35 U.S.C 103(a) as being unpatentable over Toshiaki (Japanese patent publication JP10121913) in view of Seki (4015436) as applied to claim 7 further in view of Sterlini (US patent number 4187899).

17. In re claim 8 Toshiaki in view of Seki disclose the claimed invention except stating that the inlet and outlet of the cooling means are in heat exchange communication. But Sterlini teaches an inlet of a direct cooling means communicates with an outlet of an indirect cooling means, in figure 6.

It would have been obvious to one skilled in the art at the time the invention was made to modify the modified compressor of Toshiaki and make communicate (directly or indirectly) the direct cooling means and the indirect cooling means as taught by Sterlini in order to have heat exchange process and lower the temperature of one of the fluid. Please note that in regards to the limitation "cryogenic cooling", the system of Toshiaki and Seki involve cryogenic cooling.

Alternate Claim Rejections - 35 USC § 103

18. Claims 1-4, 6-16 are rejected under 35 U.S.C 103(a) as being unpatentable over Swearingen (US patent number 3889485) in view of Blotanberg (US patent number 4362462).

19. In re claim 1 Swearingen teaches process for liquefying natural gas including:

- Rotary liquefied natural gas boil-off compressor (35,12,19,20),in figure 3,comprising at least two compression stages (35,12) in series , a gas passage (10,11,17) passing through the series of compression stages (35,12,19,20) the gas passage (10,11,17) extending through and being in heat exchange relationship with at least one cooling means (18) disposed between the compression stages (between 35 and 12 or between 12 and 19) , wherein the at least one cooling means (18) is a cryogenic cooling means (even the temperature of the last stage compressed fluid exiting heat exchanger 18 which is point 22 is -230 ^{0}F as indicated in column 7,lines 48-50.See also figure 2). Swearingen ,however fails to teach a valve means for controlling flow coolant to the cryocoller.But Blotanberg teaches a valve means (38, 48), in figure 2 for controlling (via controller 46, 48) flow of coolant into the cooling means (16, 18) in response to the inlet temperature, or a related parameter, of the next compression stage (12 or 14) next in series downstream of the cooling means (16 or 18) to maintain inlet temperature at a temperature between chosen sub ambient temperature limits, in column 4, lines 29-62. It would have been

obvious to one having ordinary skill in the art at the time of the invention was made to modify the cryogenic compressor system of Swearingen by including a valve system for the inter stage intercoolers as taught by Blotanberg in order to automatically monitor or adjust when needed the correct working temperature of the working fluid.

20. In re claim 2 Swearingen in view of Blotanberg as applied to claim 1 disclose the claimed invention:

Swearingen discloses:

- The cryogenic cooling means (18) comprises an indirect cooling means (separate flow lines 18a-18d and no fluid mixing), in figure 3.

21. In re claim 3 Swearingen in view of Blotanberg as applied to claim 1 disclose the claimed invention:

Swearingen '485 discloses:

- The cryogenic cooling means comprises a direct cooling means (discharge from compressor 12 and flow line 10 from cryogenic cooler mix resulting heat exchange which is direct cooling means and then delivered to compressor 17 via line 17 in figure 3).

22. In re claim 4 Swearingen in view of Blotanberg as applied to claim 3 disclose the claimed invention:

Swearingen discloses:

- The direct cooling means (discharge from compressor 12 and flow line 10 from cryogenic cooler mix resulting heat exchange which is direct cooling means and then delivered to compressor 17 via line 17 in figure 3)

comprises a chamber (the mixing chamber of line 10 and discharge of compressor 12) having an inlet (line 10 can be taken as inlet for the mixing chamber) for the introduction of a cryogenic liquid, in figure 3..

23. In re claim 6 Swearingen in view of Blotanberg as applied to claim 1 disclose the claimed invention:

Swearingen discloses:

- There is a cryogenic cooling means (18) intermediate each pair of successive compression stages (35, 12 and 12, 17), in figure 3.

24. In re claim 7 Swearingen in view of Blotanberg as applied to claim 1 disclose the claimed invention:

Swearingen discloses:

- There are at least three compression stages (35, 12, 17) in sequence and in that there is at least one direct cryogenic cooling means (discharge from compressor 12 and flow line 10 from cryogenic cooler mix resulting heat exchange which is direct cooling means and then delivered to compressor 17 via line 17 in figure 3) and at least one indirect cryogenic cooling means (18), in figure 3.

25. In re claim 8 Swearingen '485 in view of Blotanberg '462 as applied to claim 7 disclose the claimed invention:

Swearingen discloses:

- An inlet of a direct cryogenic cooling means (which is discharge from compressor 12) communicates with an outlet of an indirect cooling cryogenic means (which is line 10), in figure 3.

26. In re claim 9 Swearingen in view of Blotanberg as applied to claim 1 disclose the claimed invention:

Swearingen discloses:

- There is a cryogenic cooling means (18) downstream of the final compression stage (20), in figure 3.

27. In re claim 10 Swearingen in view of Blotanberg as applied to claim 1 disclose the claimed invention:

Swearingen discloses:

- There is a cryogenic cooling means (18) upstream of the first compression stage (12), in figure 1.

28. In re claim 11 Swearingen in view of Blotanberg as applied to claim 1 disclose the claimed invention:

Swearingen discloses:

- The compressor (12) has an intermediate inlet communicating with a forced liquefied natural gas vaporizer (18), in figure 3. Please note that the heat exchanger 18 inherently vaporizes the liquefied natural gas during the process of heat exchange.

29. In re claim 12 Swearingen in view of Blotanberg as applied to claim 1 disclose the claimed invention:

Swearingen discloses:

- A liquefied natural gas storage tank (4) having an outlet (33) for boiled-off natural gas (column 8,line 62-63) communicating with a compressor (35)

the cryogenic cooling means (18) in communication with the liquefied natural gas (via line 33) in the storage tank (4) ,in figure 3.

30. In re claim 13-16 Swearingen in view of Blotanberg disclose a method of operating a liquefied natural gas compressor because under the principles of inherency, if a prior art device, in its normal and usual operation, would necessarily perform the method claims, then the method claimed will be considered to be anticipated by the prior art device. When the prior art device is the same as a device described in the specification for carrying out the claimed method, it can be assumed the device will inherently perform the claimed process. *In re King*, 801 F.2d 1324,231 MPEP 2112.02.

In re claim 14,It would have been obvious to one having ordinary skill in the art at the time the invention was made to select the inlet temperature range for each compressor stage since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. In re claim 15 and 16 It would have been obvious to one having ordinary skill in the art at the time the invention was made to select the inlet temperature range for each compressor stage because the choice merely depends on design criteria and also since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

31. Claims 5 is rejected under 35 U.S.C 103(a) as being unpatentable over Swearingen (US patent number 3889485) in view of Blotanberg (US patent number 4362462) as applied to claim 4 further in view of Khan et al. (reissued US patent number 33408).

32. In re claim 5 Swearingen in view of Blotanberg disclose the claimed invention except the following limitation which is taught by Khan et al:

- The outlet of the direct cooling means (74) communicates with a vessel (100) adapted to disengage particles of liquid from the natural gas, the vessel (100) having an outlet (102) for natural gas communicating with compression stage (86),in figure 2 and column 4,lines 43-45. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the cryogenic compressor system of Swearingen and Blotanberg by installing separator that communicates with the direct heat exchanger as taught by Khan et al in order to separate the gaseous and liquid phases.

Response to Arguments

33. Applicant's arguments with respect to claims 1-16 have been considered but are not persuasive.

35. In regards to claim 1 and 13, applicants on page 2 paragraphs 1 argued that the gas from Toshiaki's expansion turbine 4 is not subjected to compression as called in applicant's claims. Applicants also argued that there is no disclosure in Toshiaki about the origin of the gas which is compressed in the compressors 22,

24.In the last paragraph of the same page applicant argued that it is not clear how one skilled in the art would be expected to dispose the valve 7 of Seki in the disclosure of Toshiaki.

Responding to applicants' argument:

It appears at the outset that applicants misinterpreted what the office action states. As clearly pointed out the office action does not state that the gas from the expansion turbine 4 is being compressed. The office action refers a gas passage (26) passing through the series of compression stages (22, 24), the gas passage (26) extending through and being in heat exchange relationship with at least one cooling means (27) disposed between the compression stages (22, 24).Therefore the gas being compressed is in the path 26 as clearly shown in figure 1 and discussed in paragraph [0006].There is no statement in the office action that the gas form expansion turbine being compressed. It is immaterial also what the origin of the gas being compressed since It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. ***Ex parte Masham, 2 USPQ2d 1647 (1987).***The compressor of Toshiaki is used in LNG plant as stated in paragraph [0006] and is capable of compressing LNG gas. In one of the embodiments shown in figure 4 of Toshiaki's disclosure a valve 34 is installed at the discharge side 32 of compressor 24.It is clear ,however that Toshiaki does not teach the use of similar valve between the compressor

stages. But taking into consideration that Toshiaki's general disclosure of flow regulating valve in the compressor discharge line and based on the teaching by Seki of the use of regulating valve at compressor inlet in the same field of LNG pumping environment, a skilled in the art would have installed a flow regulating valve between the compressor stages of Toshiaki just to regulate the flow rate of compressed gas from one stage to the next.

In regards to the alternate rejection applicant on page 5 paragraph 1 argued that the compressors 12 and 35 of Swearingen are with different machines having different drives as opposed to applicants claim that call for a single machine (compressor) with a single drive and at least two compression stages. In paragraph 2 of page 5 applicants argued that the office action equated heat exchanger 18 of Swearingen with the cryogenic cooling means of applicants' claims. Applicants on page 6 first paragraph argued that rather than being cryogenically cooled that the gas passing from compressor 35 to the compressor 12 is raised in temperature in the heat exchanger from -230 ^{0}F to ambient.

Responding to applicants' invention:

Regarding applicant's argument that Swearingen's compressor are involved with different machines having different drives while applicant's claim is a single compressor with a single drive please note that applicant's compressor are at least 4 (see figure 1) each one of which can be considered as separate except

that they have a common drive. Applicant didn't specify in the claims that the compressor stages are connected to each other and are driven by the same shaft. More importantly, however Swearingen in column 8, lines 10-13 clearly stated that a single multistage compressor can be used instead of the individual compressor stages. Cooling means (18) also is correctly a cryogenic cooling device (even the temperature of the last stage compressed fluid exiting heat exchanger 18 which is point 22 is -230 ^{0}F as indicated in column 7,lines 48-50.See also figure 2).The claim does not state that there is cryogenic cooling between successive compressor stages but merely between compressor stages .Therefore the cryogenic cooling device (18) by being located between the stages 35 and other compressor stages (such as 20 can be considered as cryogenic cooler between compressor stages. To at least overcome the alternate rejections discussed above applicants need to amend the claim so that it recites "the cryogenic cooler being located between successive compressor stages".

Conclusion

34. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory

action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amene S. Bayou whose telephone number is 571-270-3214. The examiner can normally be reached on Monday-Thursday,8:00 am-5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Devon Kramer can be reached on 571-272-7118. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Devon C Kramer/
Supervisory Patent Examiner, Art Unit 3746

/Amene S Bayou/

Examiner, Art Unit 3746